



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,722	03/31/2004	David Joseph Najewicz	135091-1/YOD GERD:0111	9857
7590	04/21/2006		EXAMINER COCKS, JOSIAH C	
Patrick S. Yoder FLETCHER YODER P.O. Box 692289 Houston, TX 77269-2289			ART UNIT 3749	PAPER NUMBER

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Amendment

1. Receipt of applicant's amendment filed 2/6/2006 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-4, 6-9, 11-14, 16-20, and 22-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,287,108 to Rothenberger et al. ("Rothenberger") (cited by applicant) in view of U.S. Patent No. 6,178,997 to Adams et al. ("Adams").

Rothenberger discloses in the specification and figures 1-6 an invention in the same field of endeavor as applicant's invention and similar to that described in applicant's claims 1-4, 6-9, 11-14, 16-20, and 22-39. In particular, Rothenberger shows a method of enhancing burner performance and a gas range system that includes a pressure regulator in the form of actuating device (8) which is responsive to sensed conditions including pressure fluctuations and functioning to regulate gas flow through a gas feed line (see at least col. 6, lines 55-63 and col. 8, lines 12-39). The actuating device includes a valve (4), motor (10), and actuator (9) that is also connected to the controller (7), which functions to operate the actuating device (see col. 6, lines 56-63) and control fuel flow to a gas burner (1). The controller (7) would necessarily have appropriate flow control circuitry in order to operate in response to some input by a user of the burner its associated cooking or baking appliance (note abstract) to produce the desired burner output. Rothenberger also discloses a meter/transducer (6) disposed upstream of the burner and adapted to measure a parameter of gas flow at a predetermined location (see at least col. 7, lines 17-35).

In regard to the limitations in the claims of a venturi (e.g. claim 7) and a plurality of burner ports providing secondary air entrainment (e.g. claim 8), applicant notes that such features are not inventive and present in conventional gas operated cooking appliances (see applicant's specification p. 1) of the type shown in Rothenberger. The burner (1) and burner nozzle (2) appears to represent the state conventional burner and appears to show a venture structure above nozzle (2) and a burner that would necessarily have a plurality of burner ports to provide flames for cooking. However, even if not shown, it would be obvious to a person of ordinary skill in the

Art Unit: 3749

art to incorporate the conventional burner structures identified by applicant to provide a burner assembly for a cooking appliance as is well known in art.

In regard to the limitation of a plurality of burners (e.g. claim 9), it has been held that it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. See St. Regis Paper Co. v. Bemis Co., 193 USPQ 8 and MPEP 2144.04(VI)(B). Accordingly, duplication of the burner (1) of Rothenberger is not regarded as patentably distinct.

In regard to claims 25 and 26, Rothenberger discloses the use of the recited gas fuel types (see col. 1, lines 15-24).

In regard to claims 27 and 28, Rothenberger clearly discloses that the user defined input for controlling the gas flow may selected as desired (note col. 5, lines 8-27) based on the desired heat output and environmental conditions (see col. 5, lines 45-56). This is regarded as selecting an input based on required burner power and altitude of installation.

Rothenberger does not disclose the use of a gas fuel boost pump or specifically a pump that is variable speed. As noted above, Rothenberger shows an actuating assembly with valve, motor, and actuator.

Adams teaches a fluid flow regulating device that is in the same field of endeavor as applicant's invention and Rothenberger in relating to the regulation of fluid flow to a gas burner (note Adams, col. 1, line 44). In Adams, it is taught that it is well known in the art that a valve in such a control system may be substituted with a variable speed pump located at the end of the control loop (see Adams, col. 1, lines 29-31) and thus downstream of pressure regulator (at least 12).

Art Unit: 3749

Therefore, in regard to claims 1-4, 6-9, 11-14, 16-20, and 22-39, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the valve of Rothenberger to incorporate the variable speed pump taught by Adams for the desirable purpose of controlling the amount of fluid distribution via a device well known in the art (note again Adams, col. 1, lines 30-44).

5. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothenberger in view of Adams as applied to claim 1 above and further in view of U.S. Patent No. 5,795,998 to Smith ("Smith").

In regard to claims 5 and 15, Rothenberger does not disclose the use of a variable displacement pump.

Smith teaches a fuel control and metering system that is pertinent to the problem of flow control of both applicant's invention and Rothenberger. Accordingly, Smith is considered analogous art. In Smith, it is understood that a fuel may be pumped via a variable displacement pump (see at least col. 2, lines 9-15).

Therefore, in regard to claims 5 and 15, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to substitute a variable displacement pump as taught in Smith for the valve and actuator assembly of Rothenberger as variable displacement pumps are well known in the art to desirably control a fuel flow in a heating system (see Smith, col. 2, lines 9-15).

Art Unit: 3749

6. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothenberger in view of Adams as applied to claims 10 and 21 above, and further in view of U.S. Patent No. 5,024,209 to Schaupert ("Schaupert").

Rothenberger in view of Adams teach all the limitations of claims 10 and 21 except for a throttling valve for each burner.

Schaupert teaches a cooking appliance with gas burner in the same field of endeavor as applicant's invention and Rothenberger. In Schaupert, it is understood that each gas burner of a cooking appliance includes a throttling valve (V, Figs. 1 and 2).

Therefore, in regard to claims 10 and 21, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify each burner of Rothenberger to incorporate a throttling valve as taught in Schaupert for the desirable purpose of controlling gas flow to the burner to such an extent that burner components do not exceed their permissible maximum operating temperature (see Schaupert, col. 2, lines 32-39).

Response to Arguments

7. Applicant's arguments filed 2/6/2006 have been fully considered but they are not persuasive. Applicant argues that the combination of Rothenberger and Adams does not teach a gas fuel boost pump as recited in applicant's claims. The examiner does not agree. As discussed above, the variable speed pump is considered to be the fuel boost pump recited in applicant's claims. Further, Adams clearly discloses this pump as being the final portion of the control loop (see at least Adams, col. 1, lines 29-31). This variable speed pump is therefore downstream of the pressure regulator portion of the control system.

Applicant also argues that incorporating the variable speed pump of Adams would replace the pressure regulator of Rothenberger. The examiner does not agree. Rothenberger clearly discloses a valve in addition to a pressure regulator (see Rothenberger, at least Fig. 1). Adams clearly discloses that such a valve may be substituted with a variable speed pump (see Adams, col. 1, lines 29-31) and that such a valve is a component additional to a pressure regulator portion (see Adams, at least Fig. 3 showing valve (12) and pressure regulator 11). Therefore, the prior art clearly suggests that the substitution of the pump of Adams for the valve of Rothenberger would not eliminate the pressure regulator of Rothenberger.

Applicant does not argue that the references to Smith and Schaupert are not properly applied. Therefore, these references are properly considered to show that for which they have been cited.

Accordingly, applicant's claims do not distinguish applicant's invention over the prior art of record.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 3749

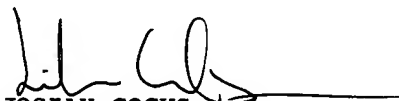
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcc
April 4, 2006


JOSIAH COCKS
PRIMARY EXAMINER
ART UNIT 3749